

CLAIMS:

For convenience, a complete listing of the currently pending claims is presented below:

1. (Currently Amended) A mobile, uniprocessor computer system comprising:
a high-level baseband controller to operate a radio module in accordance with a wireless communication protocol; and
a primary host processor coupled to the high-level baseband controller, the processor having a first portion to process real-time events received from the controller and associated with the wireless communication protocol, and having a second portion to process non real-time events,
wherein the first portion comprises a real-time event circuit to initiate execution of a real-time event handler.

2. (Original) The computer system of claim 1, wherein the first portion of the processor includes a non-symmetric processing core to run a first operating system, the second portion of the processor to run a second operating system, and the first and second portions of the processor to share a level-2 cache.

3. (Currently Amended) The computer system of claim 1, wherein the ~~first portion of the processor includes a~~ real-time event circuit is to halt a non real-time process ~~and to initiate execution of a real-time event handler.~~

4. (Original) The computer system of claim 3, wherein the first portion of the processor further includes a timer to trigger the real-time event circuit to initiate the execution of the real-time event handler.
5. (Original) The computer system of claim 3, wherein the processor includes an externally accessible event pin to trigger the real-time event circuit to initiate the execution of the real-time event handler.
6. (Original) The computer system of claim 1, wherein the non real-time events are associated with running a Windows operating system.
7. (Original) The computer system of claim 1, further comprising a radio module including buffered input-output ports coupled to the high-level baseband controller, a low-level baseband controller, and a transceiver to enable wireless communication in accordance with the wireless communication protocol, the module meeting Limited Modular Approval by the Federal Communications Commission.
8. (Original) The computer system of claim 7, wherein the low-level baseband controller includes a baseband portion associated with a link management protocol.
9. (Original) The computer system of claim 7, further comprising a flexible cable coupled to the high-level baseband controller at a first end and coupled to the ports of the radio module at a second end.

10. (Original) The computer system of claim 9, further comprising a hinged lid into which the radio module is affixed, the flexible cable extending through a hinge between the radio module and the high-level baseband controller.
11. (Original) The computer system of claim 1, further comprising a chipset, the high-level baseband controller being incorporated into the chipset.
12. (Original) The computer system of claim 1, further comprising a keyboard controller, the high-level baseband controller being incorporated into the keyboard controller.
13. (Original) The computer system of claim 1, wherein the wireless communication protocol is selected from a group consisting of Bluetooth, SWAP, and IEEE 802.11.
14. (Currently Amended) A method comprising:
- executing a process on a primary host processor of a computer system, the process being associated with a non real-time operating system;
 - receiving a real-time event by a transceiver of the computer system from an external device, the event associated with a wireless communication protocol;
 - forwarding the event to the processor; and
 - processing the event in real-time using a real-time event handler initiated by a real-time event circuit within the processor, the processing of the event allowing to maintain such that the wireless communication protocol is maintained and to perform a high-level portion of baseband processing associated with the wireless communication protocol is done by the processor independent of the operating system.

15. (Original) The method of claim 14, wherein a low-level portion of the baseband processing associated with the wireless communication protocol is done by a radio module independent of the processor.

16. (Original) The method of claim 15, wherein the wireless communication protocol is a Bluetooth protocol, and the low-level portion of the baseband processing is in accordance with the Bluetooth link management protocol.

17. (Original) The method of claim 14, wherein processing the event in real-time includes halting the process, saving a processor state to a reserved memory space, executing a real-time event handler, returning the processor state, and continuing execution of the process.

18. (Original) The method of claim 14, wherein processing the event in real-time includes processing the event in a first portion of the processor under a first operating system while continuing execution of the process in a second portion of the processor under a second operating system.

19. (Currently Amended) A mobile, uniprocessor computer system ~~programmed to implement the method of claim 14~~ comprising:

a memory; and

a processor coupled to the memory, the processor executing a set of instructions

which cause the processor to

execute a process on a primary host processor of a computer system, the process being associated with a non real-time operating system;

receive a real-time event by a transceiver of the computer system from an external device, the event associated with a wireless communication protocol;

forward the event to the processor; and

process the event in real-time using a real-time event handler initiated by a real-time event circuit within the processor, the processing of the event allowing to maintain the wireless communication protocol and to perform a high-level portion of baseband processing associated with the wireless communication protocol by the processor independent of the operating system.

20. (Currently Amended) A machine-accessible medium including machine-accessible instructions that, when executed by a computer system, cause the computer system to perform [[the]] a method of ~~claim 14~~ comprising:

executing a process on a primary host processor of a computer system, the process being associated with a non real-time operating system;

receiving a real-time event by a transceiver of the computer system from an external device, the event associated with a wireless communication protocol;

forwarding the event to the processor; and

processing the event in real-time using a real-time event handler initiated by a real-time event circuit within the processor, the processing of the event allowing to maintain the wireless communication protocol and to perform a high-level portion of baseband processing associated with the wireless communication protocol by the processor independent of the operating system.

21. (Original) The medium of claim 20, further comprising machine-accessible instructions that, when executed by the computer system, cause the computer system to further perform the method of claim 16.